

### ABSTRACT

This invention provides a method of forming a powder compact which can produce a high density compact under a high pressure and at the same time can reduce pressure for ejecting the compact from a die.

This method comprises the application step of applying a higher fatty acid lubricant to an inner surface of a heated die, and the compaction step of filling metal powder into the die and compacting the metal powder under such a pressure as to force the higher fatty acid lubricant to be chemically bonded with the metal powder and form a metallic soap coating. Since the metallic soap coating is formed between the die and a compact, friction force between the die and the compact is decreased and ejecting pressure can be remarkably decreased despite of compaction with high pressure. Besides, a high density compact can be obtained owing to the compaction with high pressure.